Serial No.: 09/846,762

In the Claims:

Please amend the claims as follows:

1. (Once Amended) A roller for a roller assembly, the roller comprising:

(a) a shaft; and

(b) a first tire mounted relative to the shaft, the first tire including:

(i) a compliant core affixed relative to the shaft for rotation with the shaft; and

(ii) a non-compliant layer connected to the core for rotation with the core.

2. The roller assembly of Claim 1, wherein the shaft comprises a plastic shaft.

3. The roller assembly of Claim 1, wherein the shaft has a linear variance less than .03 inches per linear foot.

4. The roller assembly of Claim 1, wherein the compliant core comprises a cellular structure.

5. The roller assembly of Claim 4, wherein the cellular structure has an open cell structure.

6. The roller assembly of Claim 4, wherein the cellular structure comprises polyurethane.

7. The roller assembly of Claim 1, wherein the non-compliant layer comprises a layer of elastomeric material.

8. The roller assembly of Claim 1, wherein the non-compliant layer has a durometer less than 60 Shore A.

9. The roller assembly of Claim 1, wherein the non-compliant layer has a durometer greater than 35 Shore A.

10. The roller assembly of Claim 1, wherein the non-compliant layer has a durometer greater than 35 Shore A and less than 60 Shore A.

11. The roller assembly of Claim 1, wherein the non-compliant layer includes a metal tube.

A3

12. (Once Amended) The roller assembly of Claim 11, comprising a layer of coefficient of friction enhancing material on the metal tube.

13. The roller assembly of Claim 1, wherein the non-compliant layer comprises a plastic tube.

A4

14. (Once Amended) The roller assembly of Claim 13, comprising a layer of coefficient of friction enhancing material on the plastic tube.

15. The transport mechanism of Claim 1, comprising a second tire mounted on the shaft.

16. The roller assembly of Claim 15, wherein the second tire comprises:

(a) a compliant core; and

(b) a non-compliant layer on the core.

17. The roller assembly of Claim 16, wherein the non-compliant layer comprises a layer of elastomeric material.

18. The roller assembly of Claim 16, wherein the non-compliant layer comprises a layer of synthetic rubber.

19. The roller assembly of Claim 16, comprising a coefficient of friction enhancing surface on the non-compliant layer of one of the first tire and the second tire.

20. (Once Amended) A tire for a roller for transporting a sheet material, the roller including a shaft, and having an unloaded state and a loaded state, the tire comprising:

A5

(a) a compliant core connected relative to the shaft for rotation with the shaft; and

(b) a non-compliant layer connected to and surrounding the compliant core and the shaft, the compliant core and the non-complaint layer being concentric in the unloaded configuration, and the shaft being offset from the concentric state in the loaded state, the non-compliant layer selected to preclude a deformation of the non compliant layer in the loaded

state sufficient to induce skewing or scuffing of the sheet material upon contact with the sheet material.

21. (Once Amended) The tire of Claim 20, wherein the non-compliant layer has a constant cross section between the unloaded state and the loaded state.

22. A roller having an unloaded concentric configuration and a loaded non-concentric configuration, the roller comprising:

(a) a shaft;

(b) a non-compliant layer; and

(c) a compliant core intermediate the non-compliant layer and the shaft, the compliant core selected to produce a varying annular segment size of the compliant core and the non compliant layer selected to produce a constant annular segment size during rotation of the shaft in the loaded non-concentric configuration.

23. The roller of Claim 22, wherein the non-compliant layer is one of a metal tube or a plastic tube.

24. The roller of Claim 22, wherein the compliant layer has a cellular structure.

25. (Once Amended) A tire for a roller, comprising:

(a) a hub; and

(b) a first tire mounted on the hub for rotation with the hub, the first tire including:

(i) a compliant core affixed to the hub for rotation with the hub; and

(ii) a non compliant layer connected to the core for rotation with the core for rotation with the core.